

CLAIMS

1. A disk holder comprising:

    a plurality of holder plates that individually hold  
    a plurality of disks, and

    a plurality of disk holding mechanisms with which  
    the holder plates are provided, wherein

        the disk holding mechanism comprises a disk hold link  
        that comprises a catch that engages with and disengages from the  
        center hole of the disk.

2. The disk holder according to claim 1, wherein

    at least a pair of the disk hold links is provided  
    so as to be able to turn in the direction of engagement with and  
    disengagement from the disk center hole about a common axis;

    a disk hold arm for allowing the disk hold link to  
    turn is provided so as to be able to perform a sliding movement  
    in the radial direction of the disk; and

    a depressed portion that is biased by an external  
    force is provided in the vicinity of the outer edge of the disk  
    of the disk hold arm.

3. The disk holder according to claim 1 or 2, wherein

    a hole is formed in a position corresponding with

the center hole of the disk in the holder plate; and  
the disk hold link is installed in the hole.

4. The disk holder according to any one of claims 1 to 3, wherein

the holder plate is substantially fan-shaped, and  
the arc of the holder plate is shorter than a semi-circle of the  
disk.

5. A disk drive, comprising the disk holder according  
to any one of claims 1 to 4, wherein

a plurality of the holder plate in the disk holder  
are arranged stacked such that each holder plate can be individually  
raised and lowered,

the disk drive further comprising:

a drive unit for playing back a desired disk;  
a disk selector that forms a space above and below  
the desired disk by raising and lowering a holder plate in the  
disk holder; and

drive moving means for moving the drive unit into  
the space formed as a result of raising and lowering the holder  
plate.

6. The disk drive according to claim 5, wherein

disk grasping means for grasping and releasing the

desired disk is provided in sync with the engagement and disengagement of the catch of the disk hold link when the holder plate is raised and lowered by the disk selector.

7. A disk alignment mechanism for aligning a desired disk when the desired disk is transferred between a disk holder capable of housing a plurality of disks and a drive unit for playing back the desired disk, comprising:

disk grasping means for grasping only the desired disk by separating the same from the disk holder in a space that is produced by dividing the disk holder.

8. The disk alignment mechanism according to claim 7, wherein the disk grasping means comprises a disk feed mechanism that feeds a disk into and out of the disk holder.

9. The disk alignment mechanism according to claim 8, wherein the disk feed mechanism comprises a loading roller that is provided so as to be capable of moving in the direction of contact with and separation from the desired disk.

10. The disk alignment mechanism according to any one of claims 7 to 9, wherein the disk grasping means comprises a disk stopper mechanism that grasps the outer edge of the desired disk.

11. The disk alignment mechanism according to any one of claims 7 to 10, wherein a disk holding mechanism, which releases the center hole of the disk in sync with the grasping of the disk by the disk grasping means and holds the center hole of the disk in sync with the release of the disk by the disk grasping means, is provided in the disk holder.

12. The disk alignment mechanism according to any one of claims 7 to 11, wherein a disk clamping mechanism, which releases the center hole of the disk in sync with the grasping of the disk by the disk grasping means and holds the center hole of the disk in sync with the release of the disk by the disk grasping means, is provided in the drive unit.

13. A disk alignment mechanism for aligning a desired disk when the desired disk is transferred between a disk holder capable of housing a plurality of disks and a drive unit for playing back the desired disk and when the desired disk is ejected from the disk holder, comprising:

disk grasping means for grasping only the desired disk by separating the same from the disk holder in a space that is produced by dividing the disk holder, wherein

the disk grasping means comprises a disk stopper mechanism that grasps the outer edge of the desired disk and a

disk feed mechanism that feeds the desired disk in and out of the disk holder;

the disk feed mechanism is provided to be capable of moving in the direction of contact with and separation from the disk in order to contact the disk following the operation to grasp the desired disk by the disk stopper mechanism.

14. The disk alignment mechanism according to claim 13, wherein the disk feed mechanism comprises a loading roller that feeds the disk by sandwiching the disk.

15. The disk alignment mechanism according to claim 13 or 14, wherein the disk grasping means comprises a disk guide that guides the movement of the disk by contacting the disk between the operation to grasp the desired disk by the disk stopper mechanism and the operation to contact the disk by the disk feed mechanism.

16. The disk alignment mechanism according to claim 15, wherein the disk guide is provided so as to be able to move in the direction of contact with and separation from the disk in accordance with the movement of the disk feed mechanism.